KILIAN WAN

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website: kilianwan.github.io

EDUCATION

M.Sc. in Financial Engineering 2024 – present
École polytechnique fédérale de Lausanne (EPFL)

B.Sc. in Mathematics | ***Thesis : Rates of convergence for projection estimators & B-splines*** 2021 – 2024
Supervised by Prof. **Victor M. Panaretos** at École polytechnique fédérale de Lausanne (EPFL)

RESEARCH EXPERIENCE

Research Assistant | **EPFL** Summer 2025
Contributed to a research project at the intersection of deep learning and finance. Implemented a custom Transformer-based architecture for tabular data, integrated the model into an existing ML pipeline with cross-validation and rolling-window evaluation.
Supervised by Prof. **Semyon Malamud** & PhD candidate **Johannes Schwab**

TEACHING EXPERIENCE

Teaching Assistant | **EPFL** 2023 – present

- **Analyse I**, **Analyse A** and **Analyse B** (Prof. **Sacha Friedli**)
- **Analyse Avancée I** (Prof. **François Genoud**)
- **Analyse B** (Prof. **Ana Khukhro**)

As a Teaching Assistant, I support students during tutorials, guiding them through the learning process to help ensure their academic success. I also assist with grading assignments and providing feedback, as well as answering questions on the course forum to address any doubts or challenges students may have.

PROJECTS

Stock Return Forecasting with Multi-Modal Deep Learning | **Github : [Link]**
Built LSTM models combining CRSP/Compustat data with FinBERT-based sentiment from earnings calls. Achieved improved accuracy (lower MSE/RMSE) using text+data over structured data alone.

Convergence of projection estimators | **Github : [Link]**
Investigated convergence rates of projection estimators with a focus on B-splines. Provided detailed proofs of a general convergence theorem, and implemented B-spline approximations in R to demonstrate practical relevance in smoothing and function estimation.

Mean-Reversion Trading Strategy | **Github : [Link]**
Designed and implemented a mean-reversion strategy on KO/PEP stock pairs using the ADF test, z-score signals, and rule-based trading logic. Conducted backtests and grid search to optimize Sharpe Ratio. Full pipeline developed in Python

SKILLS

Programming: Python, PyTorch, R Studio, LaTeX
Languages: English (full professional proficiency), Spanish, French, Catalan (native)

HOBBIES

Sports: Fitness (3 years), Football (7 years), Karate (7 years), Handball (2 years)
Music: Piano (3 years)